

Abstract

In a partial load range of the engine, control of the flowing state of sucked and discharged gas is executed between a pair of cylinders, an exhaust stroke of one of the cylinders overlapping with an intake stroke of the other, so that burnt gas discharged from preceding cylinders 2A, 2D on the exhaust-stroke side is introduced, in a state where it has been discharged, through an inter-cylindrical gas passage 22 into following cylinders 2B, 2C on the intake stroke side. In a higher load range than the partial load range, control is executed so that a fresh-air introducing valve 18 disposed in a fresh-air introduction passage of the following cylinders 2B, 2C is opened, both the burnt gas and fresh air are introduced into the following cylinders 2B, 2C, and fuel is supplied to conduct combustion in the following cylinders 2B, 2C.